

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for reducing an electromagnetic disturbance wave generated at an electronic apparatus, by covering the electronic apparatus with a housing which is formed by a material having a shield effect against an electromagnetic wave; comprising:

providing a space forming part within the housing for radiation of heat or wiring in the housing,

wherein the providing positions the space forming part, using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard, so that a longitudinal direction of the space forming part is formed along said path of a surface electric current distribution ~~which would exist if the space forming part was not provided in the housing.~~

Claim 2 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing is formed by a material including a conductor or a semiconductor which has a volume resistivity of less than or equal to $10^4 \Omega \text{cm}$.

Claim 3 (Original): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the space forming part is formed so as to have a slit shape or a rectangular shape, and

the space forming part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 4 (Original): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 3,

wherein the housing has a rectangular parallelepiped shape, and

the space forming part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical formula.

Claim 5 (Original): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the space forming part is formed so as to have a slit shape or a rectangular shape, and

the space forming part in the longitudinal direction is formed radially from a center part of a magnetic field situated at an inside part of the housing, calculated by a designated numerical formula.

Claim 6 (Original): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein a measurement of the housing is set so that a resonance frequency of an electromagnetic wave in the housing is generated only by a frequency higher than an upper limit frequency of an EMI (ElectroMagnetic Interference) regulation.

Claim 7 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein a hole forming part other than the space forming part is provided, and
a size of the hole forming part is set so as to be less than or equal to one fourth, more preferably less than or equal to one tenth, of the length of an electromagnetic wave to be reduced.

Claim 8 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the space forming part is provided at an upper or lower part, or the upper and lower parts of the housing.

Claim 9 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing has a connection part, and
the connection part in the longitudinal direction is provided so as to be along the longitudinal direction of the space forming part.

Claim 10 (Withdrawn)(Currently Amended): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing has a connection part, and
the longitudinal direction of the connection part is formed along said path of a surface electric current distribution using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard which

~~would exist if the connection part was not provided in the housing.~~

Claim 11 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 10,

wherein the connection part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 12 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 10,

wherein the housing has a rectangular parallelepiped shape, and
the connection part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical formula.

Claim 13 (Withdrawn)(Currently Amended): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing has a connection part having a good electrical resistance and a connection part having a bad electrical resistance, and

the connection part having the bad electrical resistance in a longitudinal direction is formed along a path of a surface electric current distribution using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard ~~which would exist if the connection part having the bad electrical resistance was not provided in the housing.~~

Claim 14 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 13,

wherein the connection part having the bad electrical resistance in a longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 15 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 13,

wherein the housing has a rectangular parallelepiped shape, and
the connection part having the bad electrical resistance in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical formula.

Claim 16 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the space forming part is arranged in a direction in which a flow of a cooling medium for elimination of heat or air change is not disturbed.

Claim 17 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein a pipe for communicating between an inside and an outside of the housing is provided at the housing, and

a width of an opening part of the pipe is set so as to be less than or equal to a half of a wavelength of a frequency to be reduced.

Claim 18 (Withdrawn)(Currently Amended): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein a harness or an electrical wire or cord for communicating information or electric power between the electric apparatus situated at the inside of the housing and an outside of the housing, is provided at the housing, so as to not disturb a surface electrical current distribution path which would exist if the no harness, ~~or the~~ electrical wire or cord was ~~not~~ provided in the housing.

Claim 19 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein an electric optical conversion element for converting an electric signal of the electric apparatus provided at an inside of the housing to an optical signal,

an optical fiber for sending the optical signal converted by the electric optical conversion element from the space forming part to an outside of the housing, and

an optical electric conversion element for converting the optical signal which is sent to the outside of the housing by the optical fiber to an electric signal, are provided, so that the electric signal of the electric apparatus in the housing is converted to the optical signal by the electric optical conversion element,

the converted optical signal is sent from the space forming part to the optical electrical conversion element at the outside part of the housing and is converted to the electric signal, and

therefore information is communicated between the electric apparatus situated at the inside of the housing and the outside of the housing.

Claim 20 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein an electric infrared conversion element for converting an electric signal of the electric apparatus provided at an inside of the housing to an infrared signal, and

an infrared electric conversion element for converting the infrared signal which is converted by the electric infrared conversion element to an electric signal, are provided, so that the electric signal of the electric apparatus in the housing is converted to the infrared signal by the electric infrared conversion element,

the converted infrared signal is sent from the space forming part to the outside part of the housing, and

the infrared signal sent to the outside part of the housing is converted to the electric signal by the infrared electric conversion element, and

therefore information is communicated between the electric apparatus situated at the inside of the housing and the outside of the housing.

Claim 21 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein a heat pipe for radiating heat generated at the electric apparatus provided at the inside of the housing to an outside part of the housing, is provided along a wall surface of the housing.

Claim 22 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing is formed by a metal material.

Claim 23 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 1,

wherein the housing has an internal surface or external surface where a thin film formed by a conductor is applied.

Claim 24 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 23,

wherein the housing is formed by a material having a volume resistivity of greater than or equal to $10^8 \Omega\text{cm}$, and

the housing has an internal surface or external surface where a thin film formed by a material having a volume resistivity of less than or equal to $10^{-4} \Omega\text{cm}$ is applied.

Claim 25 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 24,

wherein the housing is formed by a plastic material, and

the housing has an internal surface or external surface where a metal thin film is applied.

Claim 26 (Withdrawn): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 23,

wherein a thickness of the thin film is greater than a skin depth of a skin effect at a lower limit frequency under an EMI (ElectroMagnetic interference) regulation.

Claim 27 (Withdrawn)(Currently Amended): The method for reducing an electromagnetic disturbance wave generated as claimed in claim 23,

wherein the thin film layer is glued to the housing via an adhesion layer, and
a sticking part of the thin film, for gluing the thin film layer, is provided in a direction
along a path of a surface electric current distribution of the housing which would exist if ~~the~~
no sticking part was ~~not~~ provided.

Claim 28 (Withdrawn): The method for reducing an electromagnetic disturbance
wave generated as claimed in claim 27,

wherein the sticking part of the thin film layer in the longitudinal direction is formed
radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 29 (Withdrawn): The method for reducing an electromagnetic disturbance
wave generated as claimed in claim 28,

wherein the housing has a rectangular parallelepiped shape, and
the sticking part for the thin film layer in the longitudinal direction is formed radially
from a gush part or a concentration part of the surface electric current calculated by a
designated numerical formula.

Claim 30 (Withdrawn): The method for reducing an electromagnetic disturbance
wave generated as claimed in claim 23,

wherein a metal pipe for communicating between an inside and an outside of the
housing is provided at the housing so as to come in contact with the thin film layer.

Claim 31 (Currently Amended): A housing structure for reducing an electromagnetic
disturbance wave generated at an electronic apparatus, by covering the electronic apparatus

with a housing which is formed by a material having a shield effect against an electromagnetic wave; comprising:

a space forming part within the housing for radiation of heat or wiring in the housing, wherein, using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard, a longitudinal direction of the space forming part is formed along said path of a surface electric current distribution ~~which would exist if the space forming part was not provided in the housing.~~

Claim 32 (Withdrawn): The housing structure as claimed in claim 31, wherein the housing is formed by a material including a conductor or a semiconductor which has a volume resistivity of less than or equal to $10^4 \Omega \text{cm}$.

Claim 33 (Original): The housing structure as claimed in claim 31, wherein the space forming part is formed so as to have a slit shape or a rectangular shape, and the space forming part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 34 (Original): The housing structure as claimed in claim 33, wherein the housing has a rectangular parallelepiped shape, and the space forming part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical

formula.

Claim 35 (Original): The housing structure as claimed in claim 31,
wherein the space forming part is formed so as to have a slit shape or a rectangular
shape, and

the space forming part in the longitudinal direction is formed radially from a center
part of a magnetic field situated at an inside part of the housing, calculated by a designated
numerical formula.

Claim 36 (Original): The housing structure as claimed in claim 31,
wherein a measurement of the housing is set so that a resonance frequency of an
electromagnetic wave in the housing is generated only by a frequency higher than an upper
limit frequency of an EMI (ElectroMagnetic Interference) regulation.

Claim 37 (Withdrawn): The housing structure as claimed in claim 31,
wherein a hole forming part other than the space forming part is provided, and
a size of the hole forming part is set so as to be less than or equal to one fourth, more
preferably less than or equal to one tenth, of the wavelength of an electromagnetic wave to be
reduced.

Claim 38 (Withdrawn): The housing structure as claimed in claim 31,
wherein the space forming part is provided at an upper or lower part, or the upper and
lower parts of the housing.

Claim 39 (Withdrawn): The housing structure as claimed in claim 31,

wherein the housing has a connection part, and
the connection part in the longitudinal direction is provided so as to be along the longitudinal direction of the space forming part.

Claim 40 (Withdrawn)(Currently Amended): The housing structure as claimed in claim 31,

wherein the housing has a connection part, and
using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard, the longitudinal direction of the connection part is formed along said path of a surface electric current distribution ~~which would exist if the space forming part was not provided in the housing.~~

Claim 41 (Withdrawn): The housing structure as claimed in claim 40,
wherein the connection part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 42 (Withdrawn): The housing structure as claimed in claim 40,
wherein the housing has a rectangular parallelepiped shape, and
the connection part in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical formula.

Claim 43 (Withdrawn)(Currently Amended): The housing structure as claimed in claim 31,

wherein the housing has a connection part having a good electrical resistance and a connection part having a bad electrical resistance, and

the connection part having the bad electrical resistance in a longitudinal direction is formed along a path of a surface electric current distribution using a path of a surface electric current distribution which would exist if no space forming part was provided in the housing as a positioning standard ~~which would exist if the connection part having the bad electrical resistance was not provided in the housing.~~

Claim 44 (Withdrawn): The housing structure as claimed in claim 43,
wherein the connection part having the bad electrical resistance in a longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 45 (Withdrawn): The housing structure as claimed in claim 43,
wherein the housing has a rectangular parallelepiped shape, and
the connection part having the bad electrical resistance in the longitudinal direction is formed radially from a gush part or a concentration part of the surface electric current calculated by a designated numerical formula.

Claim 46 (Withdrawn): The housing structure as claimed in claim 31,
wherein the space forming part is arranged in a direction in which a flow of a cooling medium for elimination of heat or air change is not disturbed.

Claim 47 (Withdrawn): The housing structure as claimed in claim 31,

wherein a pipe for communicating between an inside and an outside of the housing is provided at the housing, and

a width of an opening part of the pipe is set so as to be less than or equal to a half of a wavelength of a frequency to be reduced.

Claim 48 (Withdrawn)(Currently Amended): The housing structure as claimed in claim 31,

wherein a harness or an electrical wire or cord for communicating information or electric power between the electric apparatus situated at the inside of the housing and an outside of the housing, is provided at the housing, so as to not disturb a surface electrical current distribution path which would exist if ~~the~~ no harness, ~~or the~~ electrical wire or cord was ~~not~~ provided in the housing.

Claim 49 (Withdrawn): The housing structure as claimed in claim 31,

wherein an electric optical conversion element for converting an electric signal of the electric apparatus provided at an inside of the housing to an optical signal,

an optical fiber for sending the optical signal converted by the electric optical conversion element from the space forming part to an outside of the housing, and

an optical electric conversion element for converting the optical signal which is sent to the outside of the housing by the optical fiber to an electric signal, are provided, so that the electric signal of the electric apparatus in the housing is converted to the optical signal by the electric optical conversion element,

the converted optical signal is sent from the space forming part to the optical electrical conversion element at the outside part of the housing and is converted to the electric signal, and

therefore information is communicated between the electric apparatus situated at the inside of the housing and the outside of the housing.

Claim 50 (Withdrawn): The housing structure as claimed in claim 31,
wherein an electric infrared conversion element for converting an electric signal of the electric apparatus provided at an inside of the housing to an infrared signal, and
an infrared electric conversion element for converting the infrared signal which is converted by the electric infrared conversion element to an electric signal, are provided, so that the electric signal of the electric apparatus in the housing is converted to the infrared signal by the electric infrared conversion element,
the converted infrared signal is sent from the space forming part to the outside part of the housing, and the infrared signal sent to the outside part of the housing is converted to the electric signal by the infrared electric conversion element, and
therefore information is communicated between the electric apparatus situated at the inside of the housing and the outside of the housing.

Claim 51 (Withdrawn): The housing structure as claimed in claim 31,
wherein a heat pipe for radiating a heat generated at the electric apparatus provided at the inside of the housing to an outside part of the housing, is provided along a wall surface of the housing.

Claim 52 (Withdrawn): The housing structure as claimed in claim 31,
wherein the housing is formed by a metal material.

Claim 53 (Withdrawn): The housing structure as claimed in claim 31,

wherein the housing has an internal surface or external surface where a thin film formed by a conductor is applied.

Claim 54 (Withdrawn): The housing structure as claimed in claim 53,
wherein the housing is formed by a material having a volume resistivity of greater than or equal to $10^8 \Omega\text{cm}$, and

the housing has an internal surface or external surface where a thin film formed by a material having a volume resistivity of less than or equal to $10^{-4} \Omega\text{cm}$ is applied.

Claim 55 (Withdrawn): The housing structure as claimed in claim 54,
wherein the housing is formed by a plastic material, and
the housing has an internal surface or external surface where a metal thin film is applied.

Claim 56 (Withdrawn): The housing structure as claimed in claim 53,
wherein a thickness of the thin film is greater than a skin depth of a skin effect at a lower limit frequency under an EMI (ElectroMagnetic Interference) regulation.

Claim 57 (Withdrawn)(Currently Amended): The housing structure as claimed in claim 53,
wherein the thin film layer is glued to the housing via an adhesion layer, and
a sticking part of the thin film, for gluing the thin film layer, is provided in a direction along a path of a surface electric current distribution of the housing which would exist if ~~the~~ no sticking part was ~~not~~ provided.

Claim 58 (Withdrawn): The housing structure as claimed in claim 57,
wherein the sticking part of the thin film layer in the longitudinal direction is formed
radially from a gush part or a concentration part of the surface electric current of the housing.

Claim 59 (Withdrawn): The housing structure as claimed in claim 58,
wherein the housing has a rectangular parallelepiped shape, and
the sticking part for the thin film layer in the longitudinal direction is formed radially
from a gush part or a concentration part of the surface electric current calculated by a
designated numerical formula.

Claim 60 (Withdrawn): The housing structure as claimed in claim 53,
wherein a metal pipe for communicating between an inside and an outside of the
housing is provided at the housing so as to come in contact with the thin film layer.